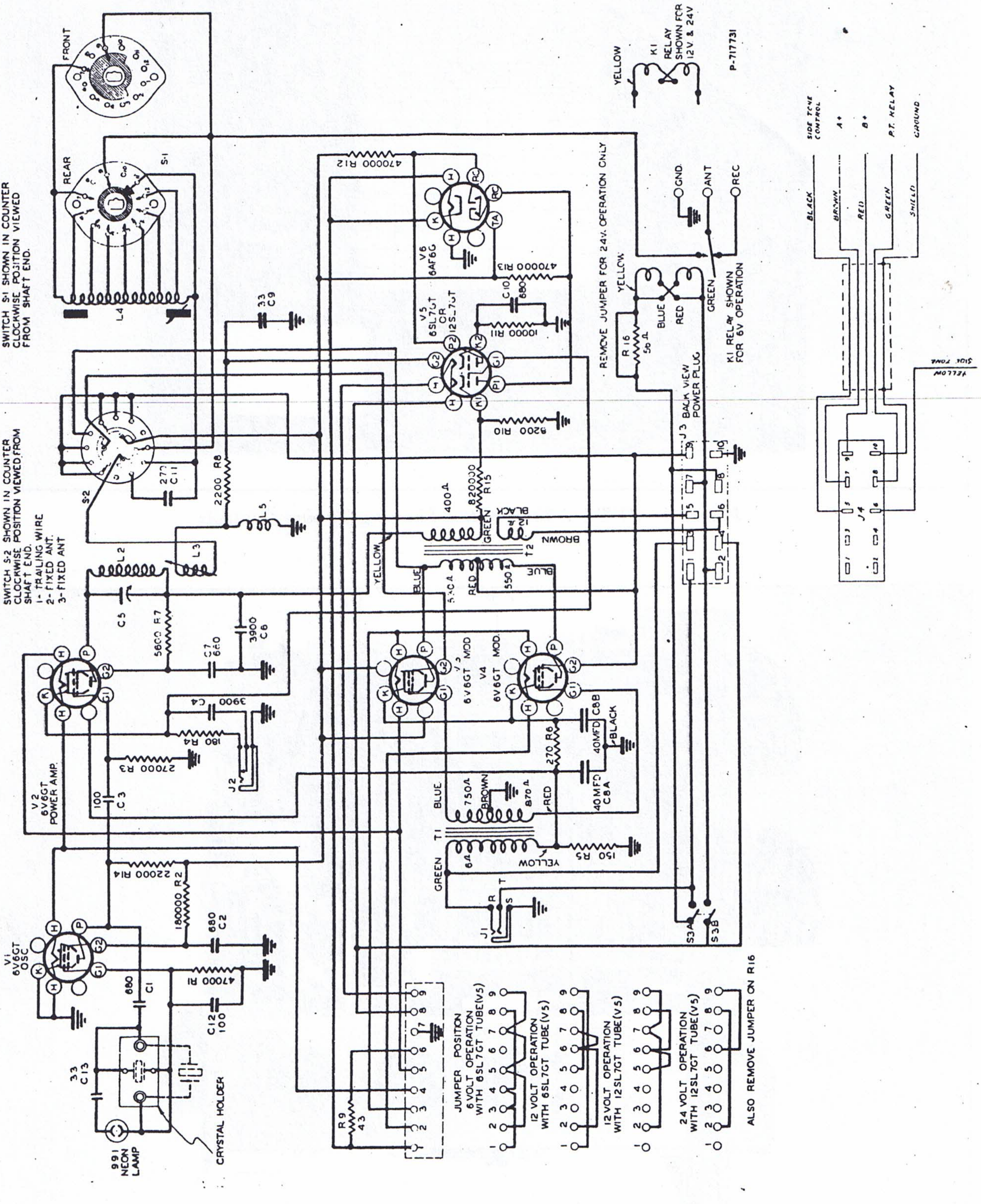


Figure 5—AVT-112A Transmitter Schematic Diagram
(Schematic P-717731, M-429634)

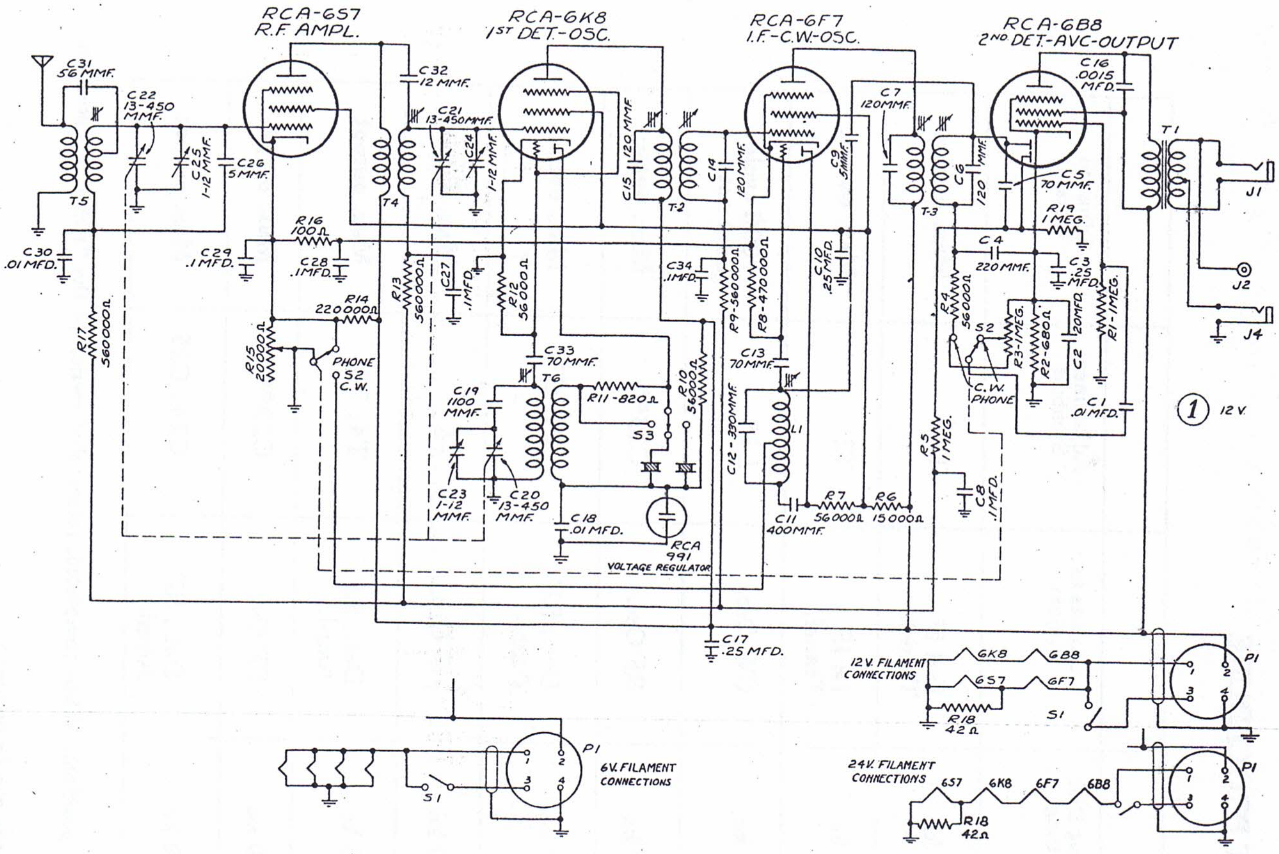


*Figure 10—Receiver*
*(Schematic P-714435)*

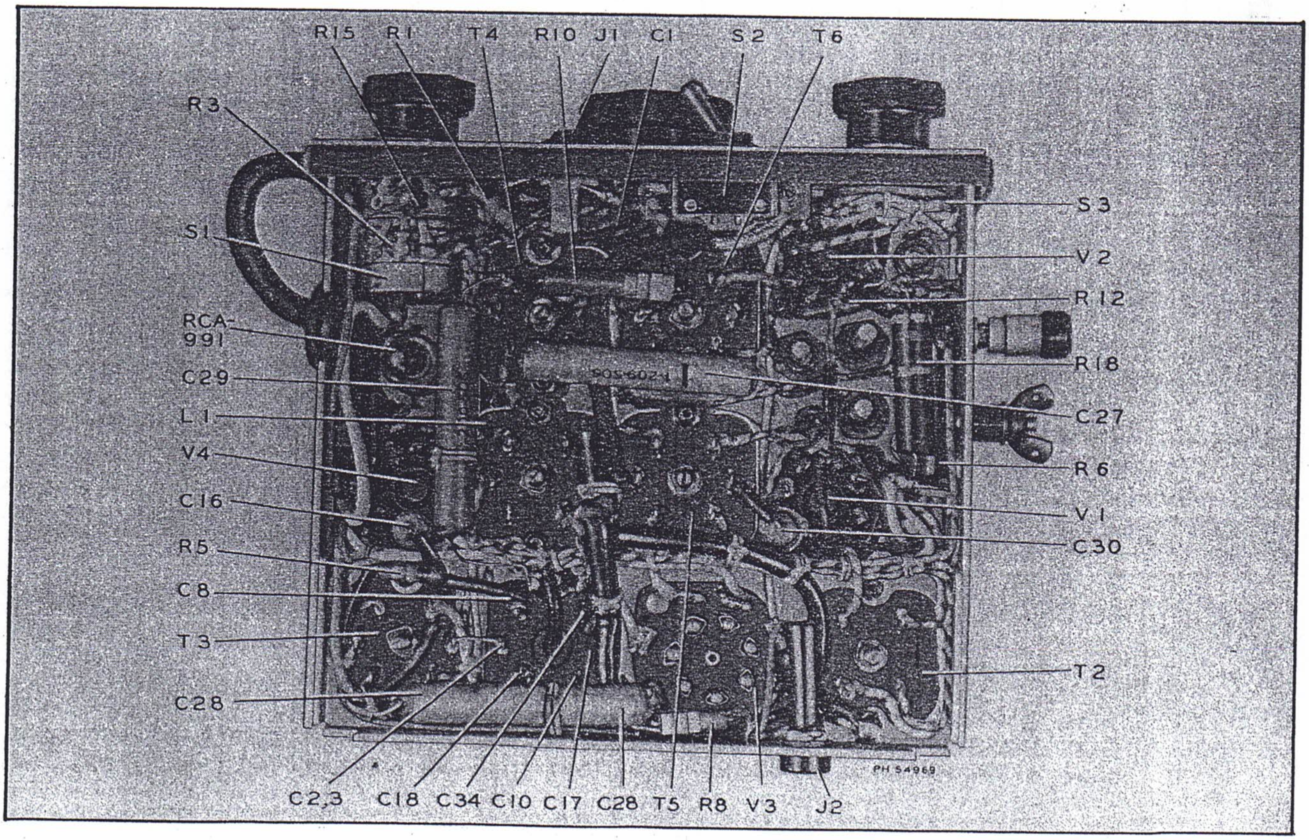


*Figure 11—Receiver Chassis*
*(Bottom View)*

# POWER SUPPLY MAINTENANCE

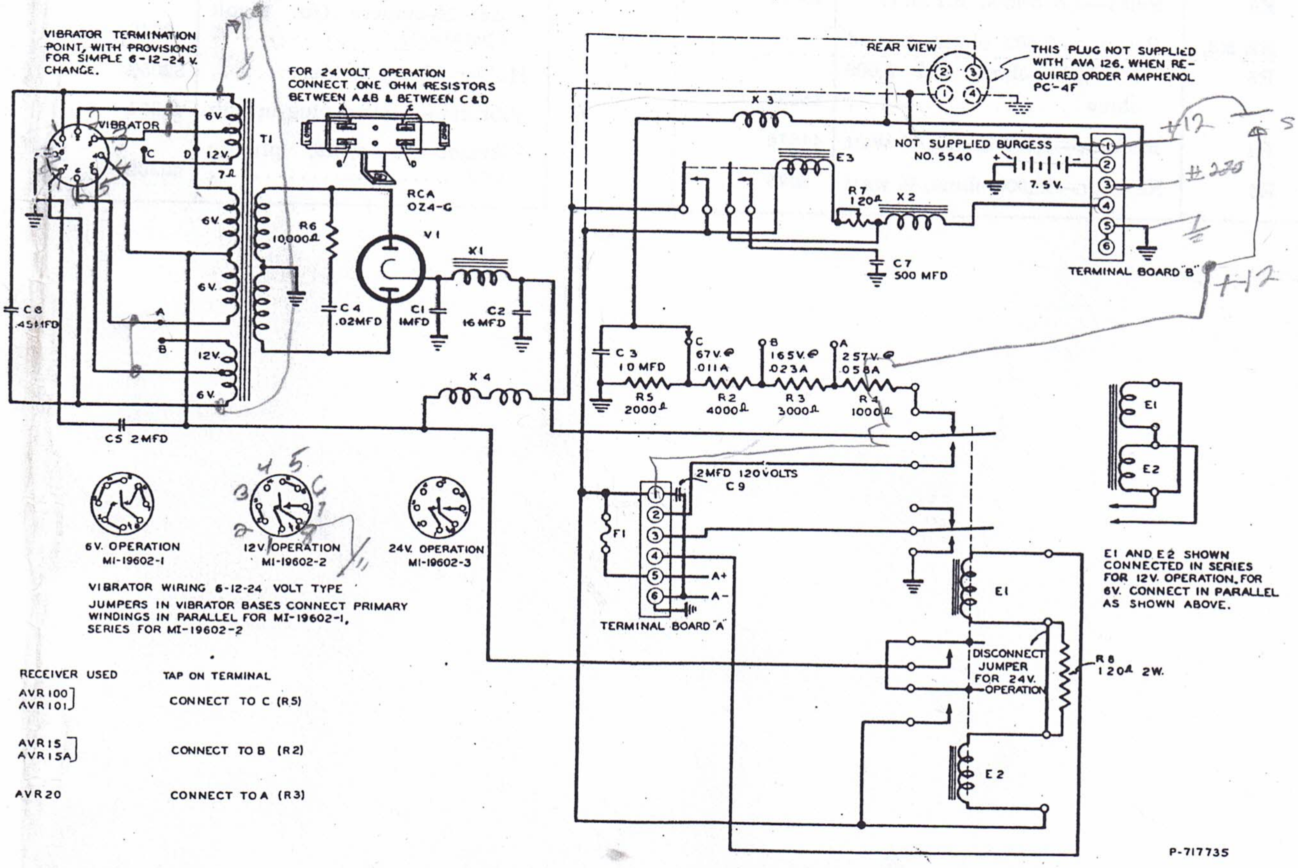
All relay contacts should be inspected and cleaned at the time of top engine overhaul, or every 60 days if the power supply unit is frequently used. To clean the contacts, use carbon tetrachloride (carbona) applied with a soft brush, then burnish the contacts with a burnishing tool, such as the Stock No. 22963 relay cleaning tool. When cleaning the relay, do not distort the contact springs. The wiring and mounting screws should be inspected at the same time to check for any loose contacts or mountings.

Under no circumstances should the vibrator unit itself be tampered with. If its operation is unsatisfactory, the vibrator should be replaced. The life of the vibrator is conservatively set at 200 hours of operation. Slightly reduced overall voltage in the various high-voltage leads accompanied by an abnomally high vibrator noise level in the side-tone is an indication of faulty vibrator operation.

The aircraft battery should be checked to see that it is properly charged. If the vibrator fails to start, it will be frequently found that the only trouble is that the battery is badly run down and in need of a charge. Complete failure of the power supply may be due to a defective component part, a broken lead, or an open fuse.

The rectifier tube used in the power supply should be checked by direct comparison to a new one at the time of inspection.

Battery connections must be clean and tight and **kept that way** to insure prompt starting of the vibrator and to maintain the full voltage at the transmitter and receiver. Deviation from proper voltage will cause short tube life and poor transmitter performance.


VIBRATOR TERMINATION POINT, WITH PROVISIONS FOR SIMPLE 6-12-24 V. CHANGE.
FOR 24 VOLT OPERATION CONNECT ONE OHM RESISTORS BETWEEN A&B & BETWEEN C&D
VIBRATOR
6V.
12V.
7Ω
6V.
6V.
12V.
6V.
T1
C
D
A
B
C8 .45MFD
C5 2MFD
R6 10,000Ω
C4 .02MFD
RCA OZ4-G
V1
X1
C1 1MFD
C2 16MFD
X4
6V. OPERATION MI-19602-1
12V. OPERATION MI-19602-2
24V. OPERATION MI-19602-3
VIBRATOR WIRING 6-12-24 VOLT TYPE
JUMPERS IN VIBRATOR BASES CONNECT PRIMARY WINDINGS IN PARALLEL FOR MI-19602-1, SERIES FOR MI-19602-2
REAR VIEW
THIS PLUG NOT SUPPLIED WITH AVA 126. WHEN REQUIRED ORDER AMPHENOL PC-4F
X3
E3
NOT SUPPLIED BURGESS NO. 5540
7.5V.
R7 120Ω
X2
C7 500 MFD
TERMINAL BOARD "B"
C3 10 MFD
C 67V.@ .011A
B 165V.@ .023A
A 257V.@ .058A
R5 2000Ω
R2 4000Ω
R3 3000Ω
R4 1000Ω
2MFD 120VOLTS C9
F1
A+
A-
TERMINAL BOARD "A"
E1
E2
E1 AND E2 SHOWN CONNECTED IN SERIES FOR 12V. OPERATION. FOR 6V. CONNECT IN PARALLEL AS SHOWN ABOVE.
DISCONNECT JUMPER FOR 24V. OPERATION
R8 120Ω 2W.
P-717735
+12
Sw on pst
#220
+12
1 2 3 4 5 6 7 8

| RECEIVER USED | TAP ON TERMINAL |
|---|---|
| AVR 100<br>AVR 101 | CONNECT TO C (R5) |
| AVR 15<br>AVR 15A | CONNECT TO B (R2) |
| AVR 20 | CONNECT TO A (R3) |

Power Supply Mod For 4 Pin 12 volt Vibrator

*Figure 16—Power Supply Unit*
*(Schematic P-717735)*

Pin # 8 GND
Pin #1 bk/yel stripe
+ bk From P.T. outer 6 volt winding
Pin #2 heavy green wire moved to T.S.
Pin #3 heavy Brown? with red dots ~~moved~~ To T.S.
Pin #4 Not Used in 12 volt operation
Pin #5 Tan with black stripes
Pin #6 heavy Black wire PT
Pin #7 BK/yel stripe + Red From PT